

08/28/03  
02570 U.S. PTO

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PTO/SB/05 (4/98)  
Approved for use through 09/30/2000. OMB 0651-0032  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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|   |  |   |
|---|--|---|
| <b>UTILITY<br/>PATENT APPLICATION<br/>TRANSMITTAL</b><br>(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b)) | Attorney Docket No.                      | PD-03W043                               |
|   | First Inventor or Application Identifier | Robert W. Byren                         |
|   | Title                                    | SYNTHETIC APERTURE LADAR SYSTEM AND ... |
|   | Express Mail Label No.                   | EU430995369US                           |

|  |   |
|--|---|
| <b>APPLICATION ELEMENTS</b><br>See MPEP chapter 600 concerning utility patent application contents.  | <b>ADDRESS TO:</b><br>Assistant Commissioner for Patents<br>Box Patent Application<br>Washington, DC 20231  |
| 1. <input checked="" type="checkbox"/> * Fee Transmittal Form (e.g., PTO/SB/17)<br>(Submit an original and a duplicate for fee processing)   | 5. <input type="checkbox"/> Microfiche Computer Program (Appendix)  |
| 2. <input checked="" type="checkbox"/> Specification [Total Pages <b>20</b> ]<br>(preferred arrangement set forth below) <ul style="list-style-type: none"><li>- Descriptive title of the Invention</li><li>- Cross References to Related Applications</li><li>- Statement Regarding Fed sponsored R &amp; D</li><li>- Reference to Microfiche Appendix</li><li>- Background of the Invention</li><li>- Brief Summary of the Invention</li><li>- Brief Description of the Drawings (if filed)</li><li>- Detailed Description</li><li>- Claim(s)</li><li>- Abstract of the Disclosure</li></ul> | 6. Nucleotide and/or Amino Acid Sequence Submission<br>(if applicable, all necessary) <ul style="list-style-type: none"><li>a. <input type="checkbox"/> Computer Readable Copy</li><li>b. <input type="checkbox"/> Paper Copy (identical to computer copy)</li><li>c. <input type="checkbox"/> Statement verifying identity of above copies</li></ul> |
| 3. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) [Total Sheets <b>09</b> ]  | <b>ACCOMPANYING APPLICATION PARTS</b>   |
| 4. Oath or Declaration [Total Pages <b>29</b> ] <ul style="list-style-type: none"><li>a. <input checked="" type="checkbox"/> Newly Executed Combined Declaration and Power of Attorney</li><li>b. <input type="checkbox"/> Copy from a prior application (37 C.F.R. § 1.63(d))<br/>(for continuation/divisional with Box 16 completed)</li><li>i. <input type="checkbox"/> DELETION OF INVENTOR(S)<br/>Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).</li></ul>   | 7. <input checked="" type="checkbox"/> Assignment Papers (cover sheet & document(s))  |
| * NOTE FOR ITEMS 1 & 13: IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.28).  |   |
| 8. <input type="checkbox"/> 37 C.F.R. § 3.73(b) Statement (when there is an assignee) <input type="checkbox"/> Power of Attorney   |   |
| 9. <input type="checkbox"/> English Translation Document (if applicable)   |   |
| 10. <input checked="" type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449 <input checked="" type="checkbox"/> Copies of IDS Citations  |   |
| 11. <input type="checkbox"/> Preliminary Amendment   |   |
| 12. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503)<br>(Should be specifically itemized)  |   |
| 13. <input type="checkbox"/> * Small Entity Statement(s) <input type="checkbox"/> Statement filed in prior application, Status still proper and desired (PTO/SB/09-12)   |   |
| 14. <input type="checkbox"/> Certified Copy of Priority Document(s) (if foreign priority is claimed)   |   |
| 15. <input type="checkbox"/> Other: .....  |   |

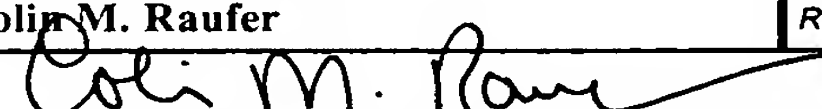
16. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: \_\_\_\_\_

Prior application information: Examiner \_\_\_\_\_ Group / Art Unit: \_\_\_\_\_

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

|   |  |  |                |          |                |
|---|--|--|----------------|----------|----------------|
| <b>17. CORRESPONDENCE ADDRESS</b>   |  |  |                |          |                |
| <input checked="" type="checkbox"/> Customer Number or Bar Code Label <b>23915</b><br>(Insert Customer No. or Attach bar code label here) |  | or <input type="checkbox"/> Correspondence address below |                |          |                |
| Name  | Patent Docket Administration<br>RAYTHEON COMPANY |  |                |          |                |
| Address   | Bldg. E04, M.S. N119<br>P.O. Box 902             |  |                |          |                |
| City  | El Segundo                                       | State  | California     | Zip Code | 90245          |
| Country   | United States of America                         | Telephone  | (310) 647-3214 | Fax      | (310) 647-2616 |

|                   |  |                                   |            |
|-------------------|--|-----------------------------------|------------|
| Name (Print/Type) | Colin M. Raufer  | Registration No. (Attorney/Agent) | 40,781     |
| Signature         |  | Date                              | 08/28/2003 |

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PTO/SB/17 (01-03)  
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

# FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ ) 1072.00

## Complete if Known

Application Number  
Filing Date  
First Named Inventor ROBERT W. BYREN  
Examiner Name  
Art Unit  
Attorney Docket No. PD03W043

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit  
Account  
Number  
Deposit  
Account  
Name

50-0616

RAYTHEON COMPANY

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments  
☒ Charge any additional fee(s) during the pendency of this application  
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

| Large Entity |          | Small Entity |          | Fee Description        | Fee Paid     |
|--------------|----------|--------------|----------|------------------------|--------------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |                        |              |
| 1001         | 750      | 2001         | 375      | Utility filing fee     | 750.00       |
| 1002         | 330      | 2002         | 165      | Design filing fee      |              |
| 1003         | 520      | 2003         | 260      | Plant filing fee       |              |
| 1004         | 750      | 2004         | 375      | Reissue filing fee     |              |
| 1005         | 160      | 2005         | 80       | Provisional filing fee |              |
| SUBTOTAL (1) |          |              |          |                        | (\$ ) 750.00 |

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims 31 -20\*\* = 11 x 18 =  
Independent Claims 04 - 3\*\* = 01 x 84 =  
Multiple Dependent =

| Large Entity |          | Small Entity |          | Fee Description  | Fee Paid     |
|--------------|----------|--------------|----------|--|--------------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |  |              |
| 1202         | 18       | 2202         | 9        | Claims in excess of 20                                     |              |
| 1201         | 84       | 2201         | 42       | Independent claims in excess of 3                          |              |
| 1203         | 280      | 2203         | 140      | Multiple dependent claim, if not paid                      |              |
| 1204         | 84       | 2204         | 42       | ** Reissue independent claims over original patent         |              |
| 1205         | 18       | 2205         | 9        | ** Reissue claims in excess of 20 and over original patent |              |
| SUBTOTAL (2) |          |              |          |  | (\$ ) 282.00 |

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

| Large Entity |          | Small Entity |          | Fee Description  | Fee Paid |
|--------------|----------|--------------|----------|--|----------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |  |          |
| 1051         | 130      | 2051         | 65       | Surcharge - late filing fee or oath  |          |
| 1052         | 50       | 2052         | 25       | Surcharge - late provisional filing fee or cover sheet                     |          |
| 1053         | 130      | 1053         | 130      | Non-English specification  |          |
| 1812         | 2,520    | 1812         | 2,520    | For filing a request for <i>ex parte</i> reexamination                     |          |
| 1804         | 920*     | 1804         | 920*     | Requesting publication of SIR prior to Examiner action                     |          |
| 1805         | 1,840*   | 1805         | 1,840*   | Requesting publication of SIR after Examiner action                        |          |
| 1251         | 110      | 2251         | 55       | Extension for reply within first month                                     |          |
| 1252         | 410      | 2252         | 205      | Extension for reply within second month                                    |          |
| 1253         | 930      | 2253         | 465      | Extension for reply within third month                                     |          |
| 1254         | 1,450    | 2254         | 725      | Extension for reply within fourth month                                    |          |
| 1255         | 1,970    | 2255         | 985      | Extension for reply within fifth month                                     |          |
| 1401         | 320      | 2401         | 160      | Notice of Appeal   |          |
| 1402         | 320      | 2402         | 160      | Filing a brief in support of an appeal                                     |          |
| 1403         | 280      | 2403         | 140      | Request for oral hearing   |          |
| 1451         | 1,510    | 1451         | 1,510    | Petition to institute a public use proceeding                              |          |
| 1452         | 110      | 2452         | 55       | Petition to revive - unavoidable   |          |
| 1453         | 1,300    | 2453         | 650      | Petition to revive - unintentional   |          |
| 1501         | 1,300    | 2501         | 650      | Utility issue fee (or reissue)   |          |
| 1502         | 470      | 2502         | 235      | Design issue fee   |          |
| 1503         | 630      | 2503         | 315      | Plant issue fee  |          |
| 1460         | 130      | 1460         | 130      | Petitions to the Commissioner  |          |
| 1807         | 50       | 1807         | 50       | Processing fee under 37 CFR 1.17(q)  |          |
| 1806         | 180      | 1806         | 180      | Submission of Information Disclosure Stmt                                  |          |
| 8021         | 40       | 8021         | 40       | Recording each patent assignment per property (times number of properties) | 40.00    |
| 1809         | 750      | 2809         | 375      | Filing a submission after final rejection (37 CFR 1.129(a))                |          |
| 1810         | 750      | 2810         | 375      | For each additional invention to be examined (37 CFR 1.129(b))             |          |
| 1801         | 750      | 2801         | 375      | Request for Continued Examination (RCE)                                    |          |
| 1802         | 900      | 1802         | 900      | Request for expedited examination of a design application                  |          |

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ ) 40.00

## SUBMITTED BY

(Complete if applicable)

Name (Print/Type) Colin M. Raufer Registration No. (Attorney/Agent) 40,781 Telephone 310-647-3214  
Signature Date 08-28-2003

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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